Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL GUIDELINE CLEARINGHOUSE

General

Guideline Title

Child passenger safety.

Bibliographic Source(s)

Durbin DR, Committee on Injury, Violence, and Poison Prevention. Child passenger safety. Pediatrics. 2011 Apr;127(4):e1050-66. [131 references] PubMed

Guideline Status

This is the current release of the guideline.

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

Recommendations

Major Recommendations

Best-Practice Recommendations

1. All infants and toddlers should ride in a rear-facing car safety seat (CSS) until they are 2 years of age or until they reach the highest weight or height allowed by the manufacturer of their CSS.
2. All children 2 years or older, or those younger than 2 years who have outgrown the rear-facing weight or height limit for their CSS, should use a forward-facing CSS with a harness for as long as possible, up to the highest weight or height allowed by the manufacturer of their CSS.
3. All children whose weight or height is above the forward-facing limit for their CSS should use a belt-positioning booster seat until the vehicle lap-and-shoulder seat belt fits properly, typically when they have reached 4 feet 9 inches in height and are between 8 and 12 years of age.
4. When children are old enough and large enough to use the vehicle seat belt alone, they should always use lap-and-shoulder seat belts for optimal protection.
5. All children younger than 13 years should be restrained in the rear seats of vehicles for optimal protection.

Clinical Algorithm(s)

An algorithm to guide the implementation of best-practice recommendations for optimal child passenger safety is provided in the Policy Statement (see the "Availability of Companion Documents" field).

Scope

Disease/Condition(s)

Motor vehicle-related injuries

Guideline Category

Counseling

Prevention

Clinical Specialty

Family Practice

Pediatrics

Intended Users

Physicians

Guideline Objective(s)

- To provide a summary of the evidence in support of 5 recommendations for best practices to optimize safety in passenger vehicles for children from birth through adolescence that all pediatricians should know and promote in their routine practice
- To provide pediatricians with a number of resources for additional information to use when providing anticipatory guidance to families

Target Population

Children from birth through adolescence and their families

Interventions and Practices Considered

1. Age appropriate use and installation of child restraints
    - Rear-facing child safety seat (CSS)
    - Forward-facing CSS
    - Belt-positioning booster seats
    - Lap-and-shoulder seat belts
2. Exposure to air bags
3. Special considerations
    - Safety of children left in or around vehicles
    - Safety of children in pick-up trucks
    - Safety of children on commercial airlines

Major Outcomes Considered

- Motor vehicle traffic-related injuries and fatalities
- Reported use of child restraint systems
- Effectiveness of car safety seats

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

A search was performed in May 2009 using Medline via the OVID Database. The search included articles from all available years, with the exception of 3 search terms for which results were limited to the past 10 years. Results were limited to articles in English only, published in peer-reviewed journals. Search terms included the following:

- Motor vehicle accidents
- Motor vehicle crashes
- Child passenger safety
- Booster seats
- Child safety seats
- Car seats
- Racial disparities (cross-referenced with other terms)
- Seat belt syndrome*
- Seat belts and children*
- Children and air bags*
- Children, safety, and airplanes
- Child restraint laws

*Results limited to the past 10 years.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Not stated

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Not stated

Description of Method of Guideline Validation

Not applicable

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Optimal safety in passenger vehicles for all children, from birth through adolescence

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

Implementation of the Guideline

Description of Implementation Strategy

Pediatricians play a critical role in promoting child passenger safety. To facilitate their widespread implementation in practice, evidence-based recommendations for optimal protection of children of all ages in passenger vehicles are presented in the form of an algorithm (Fig 1 in the Policy Statement [see the "Availability of Companion Documents" field]) with an accompanying table of explanations and definitions.

Because pediatricians are a trusted source of information to parents, every pediatrician must maintain a basic level of knowledge of these best-practice recommendations and promote and document them at every health-supervision visit. Prevention of motor vehicle crash injury is unique in health-supervision topics, because it is the only topic recommended at every health-supervision visit by *Bright Futures*. Pediatricians can also use this information to promote child passenger safety public education, legislation, and regulation at local, state, and national levels through a variety of advocacy activities, including ensuring that their state's child passenger safety law is in better alignment with the best-practice recommendations promoted in this policy statement. Because motor vehicle safety for children is multifaceted and will continue to evolve, all pediatricians should familiarize themselves with additional resources to address unique situations for their patients that may not be covered by the algorithm and to maintain current knowledge. In particular, many communities have child passenger safety technicians who have completed a standardized National Highway Traffic Safety Administration (NHTSA) course and who can provide hands-on advice and guidance to families. In most communities, child passenger safety technicians work at formal inspection stations; a list of these stations is available at www.seatcheck.org. If your community does not have an inspection station, you can find a child passenger safety technician in your area on the National Child Passenger Safety Certification Web site (http://cert.safekids.org) or the NHTSA child safety seat inspection station locator (www.nhtsa.dot.gov/cps/cpsfitting/index.cfm). Car seat checkup events are updated at www.safekidsweb.org/events/events.asp. In addition, additional resources for pediatricians and families can be found at www.aap.org or www.healthychildren.org.

Implementation Tools

Clinical Algorithm

Patient Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Safety

Identifying Information and Availability

Bibliographic Source(s)

Durbin DR, Committee on Injury, Violence, and Poison Prevention. Child passenger safety. Pediatrics. 2011 Apr;127(4):e1050-66. [131 references] PubMed

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2011 Apr

Guideline Developer(s)

American Academy of Pediatrics - Medical Specialty Society

Source(s) of Funding

American Academy of Pediatrics

Guideline Committee

Committee on Injury, Violence, and Poison Prevention

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

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Guideline Availability

Electronic copies: Available from the American Academy of Pediatrics (AAP) Policy Web site .

Print copies: Available from American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

Availability of Companion Documents

The following is available:

- Committee on Injury, Violence, and Poison Prevention, Durbin DR. Policy statement. Child passenger safety. Pediatrics. 2011 Apr; 127(4):788-93. Epub 2011 Mar 21. Electronic copies: Available from the American Academy of Pediatrics (AAP) Policy Web site .

Patient Resources

The following is available:

- Car safety seats: a guide for families. 2011 safety information. Electronic copies: Available from the American Academy of Pediatrics Healthy Children Web site .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

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